

SEQUENCE LISTING

<110> Hastings, et al

<120> Human CCN-like Growth Factor

<130> PF185D1C2

<150> US 09/853,625

<151> 2001-05-14

<150> US 09/053,587

<151> 1998-04-01

<150> US 08/468,847

<151> 1995-06-06

<160> 19

<170> PatentIn version 3.2

<210> 1

<211> 900

<212> DNA

<213> Homo sapiens

<400> 1

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agaagcagag gcaaaagaat taaccagctc ttcagtcaag caaatcctct actcaccatg      120
cttcctcctg ccattcattt ctatctcctt ccccttgcat gcatcctaata gaaaagctgt      180
ttggcttttta aaaatgatgc cacagaaatc ctttattcac atgtgggttaa acctgttcca      240
gcacacccca gcagcaacag cacgttgaat caagccagaa atggaggcag gcatttcagt      300
aacactggac tggatcggaa cactcgggtt caagtgggtt gccgggaact gcgttccacc      360
aaatacatct ctgatggcca gtgcaccagc atcagccctc tgaaggagct ggtgtgtgct      420
ggcgagtgtc tgccccctgcc agtgctccct aactggattg gaggaggcta tggaacaaag      480
tactggagca ggaggagctc ccaggagtgg cgggtgtgtca atgacaaaac ccgtaccag      540
agaatccagc tgcagtgcc aagatggcagc acacgcacct acaaaatcac agtagtcact      600
gcctgcaagt gcaagaggta caccggcag cacaacgagt ccagtcacaa ctttgagagc      660
atgtcacctg ccaagccagt ccagcatcac agagagcgga aaagagccag caaatccagc      720
aagcacagca tgagttagaa ctcagactcc cataactaga cttactagta accatctgct      780
ttacagattt gattgcttgg aagactcaag cctgccactg ctgttttctc acttgaaagt      840
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<210> 2

<211> 206

<212> PRT
<213> Homo sapiens

<400> 2

Met Leu Pro Pro Ala Ile His Phe Tyr Leu Leu Pro Leu Ala Cys Ile
1 5 10 15

Leu Met Lys Ser Cys Leu Ala Phe Lys Asn Asp Ala Thr Glu Ile Leu
20 25 30

Tyr Ser His Val Val Lys Pro Val Pro Ala His Pro Ser Ser Asn Ser
35 40 45

Thr Leu Asn Gln Ala Arg Asn Gly Gly Arg His Phe Ser Asn Thr Gly
50 55 60

Leu Asp Arg Asn Thr Arg Val Gln Val Gly Cys Arg Glu Leu Arg Ser
65 70 75 80

Thr Lys Tyr Ile Ser Asp Gly Gln Cys Thr Ser Ile Ser Pro Leu Lys
85 90 95

Glu Leu Val Cys Ala Gly Glu Cys Leu Pro Leu Pro Val Leu Pro Asn
100 105 110

Trp Ile Gly Gly Gly Tyr Gly Thr Lys Tyr Trp Ser Arg Arg Ser Ser
115 120 125

Gln Glu Trp Arg Cys Val Asn Asp Lys Thr Arg Thr Gln Arg Ile Gln
130 135 140

Leu Gln Cys Gln Asp Gly Ser Thr Arg Thr Tyr Lys Ile Thr Val Val
145 150 155 160

Thr Ala Cys Lys Cys Lys Arg Tyr Thr Arg Gln His Asn Glu Ser Ser
165 170 175

His Asn Phe Glu Ser Met Ser Pro Ala Lys Pro Val Gln His His Arg
180 185 190

Glu Arg Lys Arg Ala Ser Lys Ser Ser Lys His Ser Met Ser
195 200 205

<210> 3
<211> 33
<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 3

cactgcaagc ttattaaaaa tgatgccaca gaa 33

<210> 4

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

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catgcctcta gatatgggag tctgagttct aac 33

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<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 5

cattcgcgga tccbccatca tgcttcctcc tgccattcat 40

<210> 6

<211> 34

<212> DNA

<213> Artificial sequence

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<223> Primer

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cactgcctct agatatggga gtctgagttc taac 34

<210> 7

<211> 39

<212> DNA

<213> Artificial sequence

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<400> 7

catcgcggat ccgccatcat gcttcctcct gccattcat 39

<210> 8

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 8

tgcggatcct atgggagtct gagttctaac 30

<210> 9

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 9

gtaaaacgac ggccagt 17

<210> 10

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 10

ggaaacagct atgaccatg 19

<210> 11

<211> 379

<212> PRT

<213> Mus musculus

<400> 11

Met	Ser	Ser	Ser	Thr	Phe	Arg	Thr	Leu	Ala	Val	Ala	Val	Thr	Leu	Leu
1				5				10						15	

His	Leu	Thr	Arg	Leu	Ala	Leu	Ser	Thr	Cys	Pro	Ala	Ala	Cys	His	Cys
			20					25					30		

Pro	Leu	Glu	Ala	Pro	Lys	Cys	Ala	Pro	Gly	Val	Gly	Leu	Val	Arg	Asp
		35					40					45			

Gly	Cys	Gly	Cys	Cys	Lys	Val	Cys	Ala	Lys	Gln	Leu	Asn	Glu	Asp	Cys
	50					55					60				

Ser	Lys	Thr	Gln	Pro	Cys	Asp	His	Thr	Lys	Gly	Leu	Glu	Cys	Asn	Phe
65					70					75					80

Gly Ala Ser Ser Thr Ala Leu Lys Gly Ile Cys Arg Ala Gln Ser Glu
 85 90 95

Gly Arg Pro Cys Glu Tyr Asn Ser Arg Ile Tyr Gln Asn Gly Glu Ser
 100 105 110

Phe Gln Pro Asn Cys Lys His Gln Cys Thr Cys Ile Asp Gly Ala Val
 115 120 125

Gly Cys Ile Pro Leu Cys Pro Gln Glu Leu Ser Leu Pro Asn Leu Gly
 130 135 140

Cys Pro Asn Pro Arg Leu Val Lys Val Ser Gly Gln Cys Cys Glu Glu
 145 150 155 160

Trp Val Cys Asp Glu Asp Ser Ile Lys Asp Ser Leu Asp Asp Gln Asp
 165 170 175

Asp Leu Leu Gly Leu Asp Ala Ser Glu Val Glu Leu Thr Arg Asn Asn
 180 185 190

Glu Leu Ile Ala Ile Gly Lys Gly Ser Ser Leu Lys Arg Leu Pro Val
 195 200 205

Phe Gly Thr Glu Pro Arg Val Leu Phe Asn Pro Leu His Ala His Gly
 210 215 220

Gln Lys Cys Ile Val Gln Thr Thr Ser Trp Ser Gln Cys Ser Lys Ser
 225 230 235 240

Cys Gly Thr Gly Ile Ser Thr Arg Val Thr Asn Asp Asn Pro Glu Cys
 245 250 255

Arg Leu Val Lys Glu Thr Arg Ile Cys Glu Val Arg Pro Cys Gly Gln
 260 265 270

Pro Val Tyr Ser Ser Leu Lys Lys Gly Lys Lys Cys Ser Lys Thr Lys
 275 280 285

Lys Ser Pro Glu Pro Val Arg Phe Thr Tyr Ala Gly Cys Ser Ser Val
 290 295 300

Lys Lys Tyr Arg Pro Lys Tyr Cys Gly Ser Cys Val Asp Gly Arg Cys
 305 310 315 320

Cys Thr Pro Leu Gln Thr Arg Thr Val Lys Met Arg Phe Arg Cys Glu
325 330 335

Asp Gly Glu Met Phe Ser Lys Asn Val Met Met Ile Gln Ser Cys Lys
340 345 350

Cys Asn Tyr Asn Cys Pro His Pro Asn Glu Ala Ser Phe Arg Leu Tyr
355 360 365

Ser Leu Phe Asn Asp Ile His Lys Phe Arg Asp
370 375

<210> 12
<211> 373
<212> PRT
<213> Homo sapiens

<400> 12

Met Ser Ser Arg Ile Val Arg Glu Leu Ala Leu Val Val Thr Leu Leu
1 5 10 15

His Leu Thr Arg Val Gly Leu Ser Thr Cys Pro Ala Asp Cys His Cys
20 25 30

Pro Gly Leu Glu Cys Asn Phe Gly Ala Ser Ser Thr Ala Leu Lys Gly
35 40 45

Ile Cys Arg Ala Gln Ser Glu Gly Arg Pro Cys Glu Tyr Asn Ser Arg
50 55 60

Ile Tyr Gln Asn Gly Glu Ser Phe Gln Pro Asn Cys Lys His Gln Cys
65 70 75 80

Thr Cys Ile Leu Glu Ala Pro Lys Cys Ala Pro Gly Val Gly Leu Arg
85 90 95

Asp Gly Cys Gly Cys Cys Lys Val Cys Ala Lys Gln Leu Asn Glu Asp
100 105 110

Cys Arg Lys Thr Gln Pro Cys Asp His Thr Lys Gly Trp Arg Arg Gly
115 120 125

Ala Cys Ile Pro Leu Cys Pro Gln Glu Leu Ser Leu Pro Asn Leu Gly
130 135 140

Cys Pro Asn Pro Arg Leu Val Lys Val Thr Gly Gln Cys Cys Glu Glu

145		150		155		160
Trp Val Cys Asp	Glu Asp Ser Ile Lys Asp	Pro Met Glu Asp	Gln Asp			
	165		170			175
Gly Leu Leu Gly Lys Gly Leu Gly Phe Asp Ala Ser Glu Val Glu Leu						
	180		185			190
Thr Arg Asn Asn Glu Leu Ile Ala Val Gly Lys Gly Ser Ser Leu Lys						
	195		200			205
Arg Leu Pro Val Phe Gly Met Glu Pro Arg Ile Leu Tyr Asn Pro Leu						
	210		215			220
Gln Gly Gln Lys Cys Thr Lys Lys Ser Pro Glu Pro Val Arg Phe Thr						
	225		230			235
Tyr Ala Gly Cys Leu Ser Val Lys Lys Tyr Arg Pro Lys Tyr Cys Gly						
	245		250			255
Ser Cys Val Asp Gly Arg Cys Cys Thr Pro Gln Leu Thr Arg Thr Val						
	260		265			270
Lys Met Arg Phe Pro Cys Glu Ile Val Gln Thr Thr Ser Trp Ser Gln						
	275		280			285
Cys Ser Lys Thr Cys Gly Thr Gly Ile Ser Thr Arg Val Thr Asn Asp						
	290		295			300
Asn Pro Glu Cys Arg Leu Val Lys Glu Thr Arg Ile Cys Glu Val Arg						
	305		310			315
Pro Cys Gly Gln Pro Val Tyr Ser Ser Leu Lys Lys Gly Lys Lys Cys						
	325		330			335
Ser Lys Asp Gly Glu Thr Phe Ser Lys Asn Val Met Met Ile Gln Ser						
	340		345			350
Ser Lys Cys Asn Tyr Asn Cys Pro His Ala Asn Glu Ala Ala Phe Pro						
	355		360			365
Phe Tyr Arg Leu Phe						
	370					

<210> 13

<211> 375
 <212> PRT
 <213> Gallus gallus

<400> 13

Met Gly Ser Ala Gly Ala Arg Pro Ala Leu Ala Ala Ala Leu Leu Cys
 1 5 10 15

Leu Ala Arg Leu Ala Leu Gly Ser Pro Cys Pro Ala Val Cys Gln Cys
 20 25 30

Pro Ala Ala Ala Pro Gln Cys Ala Pro Gly Val Gly Leu Val Pro Asp
 35 40 45

Gly Cys Gly Cys Cys Lys Val Cys Ala Lys Gln Leu Asn Glu Asp Cys
 50 55 60

Ser Arg Thr Gln Pro Cys Asp His Thr Lys Gly Leu Glu Cys Asn Phe
 65 70 75 80

Gly Ala Ser Pro Ala Ala Thr Asn Gly Ile Cys Arg Ala Gln Ser Glu
 85 90 95

Gly Arg Pro Cys Glu Tyr Asn Ser Lys Ile Tyr Gln Asn Gly Glu Ser
 100 105 110

Phe Gln Pro Asn Cys Lys His Gln Cys Thr Cys Ile Asp Gly Ala Val
 115 120 125

Gly Cys Ile Pro Leu Cys Pro Gln Glu Leu Ser Leu Pro Asn Leu Gly
 130 135 140

Cys Pro Ser Pro Arg Leu Val Lys Val Pro Gly Gln Cys Cys Glu Glu
 145 150 155 160

Trp Val Cys Asp Glu Ser Lys Asp Ala Leu Glu Glu Leu Glu Gly Phe
 165 170 175

Phe Ser Lys Glu Phe Gly Leu Asp Ala Ser Glu Gly Glu Leu Thr Arg
 180 185 190

Asn Asn Glu Leu Ile Ala Ile Val Lys Gly Gly Leu Lys Met Leu Pro
 195 200 205

Val Phe Gly Ser Glu Pro Gln Ser Arg Ala Phe Glu Asn Pro Lys Cys
 210 215 220

Ile Val Gln Thr Thr Ser Trp Ser Gln Cys Ser Lys Thr Cys Gly Thr
225 230 235 240

Gly Ile Ser Thr Arg Val Thr Asn Asp Asn Pro Asp Cys Lys Leu Ile
245 250 255

Lys Glu Thr Arg Ile Cys Glu Val Arg Pro Cys Gly Gln Pro Ser Tyr
260 265 270

Ala Ser Leu Lys Lys Gly Lys Lys Cys Thr Lys Thr Lys Lys Ser Pro
275 280 285

Ser Pro Val Arg Phe Thr Tyr Ala Gly Cys Ser Ser Val Lys Lys Tyr
290 295 300

Arg Pro Lys Tyr Cys Gly Ser Cys Val Asp Gly Arg Cys Cys Thr Pro
305 310 315 320

Gln Gln Thr Arg Thr Val Lys Ile Arg Phe Arg Cys Asp Asp Gly Glu
325 330 335

Thr Phe Thr Lys Ser Val Met Met Ile Gln Ser Cys Arg Cys Asn Tyr
340 345 350

Asn Cys Pro His Ala Asn Glu Ala Tyr Pro Phe Tyr Arg Leu Val Asn
355 360 365

Asp Ile His Lys Phe Arg Asp
370 375

<210> 14
<211> 349
<212> PRT
<213> Homo sapiens

<400> 14

Met Thr Ala Ala Ser Met Gly Pro Val Arg Val Ala Phe Val Val Leu
1 5 10 15

Leu Ala Leu Cys Ser Arg Pro Ala Val Gly Gln Asn Cys Ser Gly Pro
20 25 30

Cys Arg Cys Pro Asp Glu Pro Ala Pro Arg Cys Pro Ala Gly Val Ser
35 40 45

Leu Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Lys Gln Leu
 50 55 60

Gly Glu Leu Cys Thr Glu Arg Asp Pro Cys Asp Pro His Lys Gly Leu
 65 70 75 80

Phe Cys Asp Phe Gly Ser Pro Ala Asn Arg Lys Ile Gly Val Cys Thr
 85 90 95

Ala Lys Asp Gly Ala Pro Cys Ile Phe Gly Gly Thr Val Tyr Arg Ser
 100 105 110

Gly Glu Ser Phe Gln Ser Ser Cys Lys Tyr Gln Cys Thr Cys Leu Asp
 115 120 125

Gly Ala Val Gly Cys Met Pro Leu Cys Ser Met Asp Val Arg Leu Pro
 130 135 140

Ser Pro Asp Cys Pro Phe Pro Arg Arg Val Lys Leu Pro Gly Lys Cys
 145 150 155 160

Cys Glu Glu Trp Val Cys Asp Glu Pro Lys Asp Gln Thr Val Val Gly
 165 170 175

Pro Ala Leu Ala Ala Tyr Arg Leu Glu Asp Thr Phe Gly Pro Asp Pro
 180 185 190

Thr Met Ile Arg Ala Asn Cys Leu Val Gln Thr Thr Glu Trp Ser Ala
 195 200 205

Cys Ser Lys Thr Cys Gly Met Gly Ile Ser Thr Arg Val Thr Asn Asp
 210 215 220

Asn Ala Ser Cys Arg Leu Glu Lys Gln Ser Arg Leu Cys Met Val Arg
 225 230 235 240

Pro Cys Glu Ala Asp Leu Glu Glu Asn Ile Lys Lys Gly Lys Lys Cys
 245 250 255

Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu Ser Gly
 260 265 270

Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val Cys Thr
 275 280 285

Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro Val Glu
 290 295 300

Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met Phe Ile
 305 310 315 320

Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp Ile Phe
 325 330 335

Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala
 340 345

<210> 15
 <211> 348
 <212> PRT
 <213> Mus musculus

<400> 15

Met Leu Ala Ser Val Ala Gly Pro Ile Ser Leu Ala Leu Val Leu Leu
 1 5 10 15

Ala Leu Cys Thr Arg Pro Ala Thr Gly Gln Asp Cys Ser Ala Gln Cys
 20 25 30

Gln Cys Ala Ala Glu Ala Ala Pro His Cys Pro Ala Gly Val Ser Leu
 35 40 45

Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Lys Gln Leu Gly
 50 55 60

Glu Leu Cys Thr Glu Arg Asp Pro Cys Asp Pro His Lys Gly Leu Phe
 65 70 75 80

Cys Asp Phe Gly Ser Pro Ala Asn Arg Lys Ile Gly Val Cys Thr Ala
 85 90 95

Lys Asp Gly Ala Pro Cys Val Phe Gly Gly Ser Val Tyr Arg Ser Gly
 100 105 110

Glu Ser Phe Gln Ser Ser Cys Lys Tyr Gln Cys Thr Cys Leu Asp Gly
 115 120 125

Ala Val Gly Cys Val Pro Leu Cys Ser Met Asp Val Arg Leu Pro Ser
 130 135 140

Pro Asp Cys Pro Phe Pro Arg Arg Val Lys Leu Pro Gly Lys Cys Cys
 145 150 155 160

Glu Glu Trp Val Cys Asp Glu Pro Lys Asp Arg Thr Ala Val Gly Pro
 165 170 175

Ala Leu Ala Ala Tyr Arg Leu Glu Asp Thr Phe Gly Pro Asp Pro Thr
 180 185 190

Met Met Arg Ala Asn Cys Leu Val Gln Thr Thr Glu Trp Ser Ala Cys
 195 200 205

Ser Lys Thr Cys Gly Met Gly Ile Ser Thr Arg Val Thr Asn Asp Asn
 210 215 220

Thr Phe Cys Arg Leu Glu Lys Gln Ser Arg Leu Cys Met Val Arg Pro
 225 230 235 240

Cys Glu Ala Asp Leu Glu Glu Asn Ile Lys Lys Gly Lys Lys Cys Ile
 245 250 255

Arg Thr Pro Lys Ile Ala Lys Pro Val Lys Phe Glu Leu Ser Gly Cys
 260 265 270

Thr Ser Val Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val Cys Thr Asp
 275 280 285

Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro Val Glu Phe
 290 295 300

Lys Cys Pro Asp Gly Glu Ile Met Lys Lys Asn Met Met Phe Ile Lys
 305 310 315 320

Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp Ile Phe Glu
 325 330 335

Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala
 340 345

<210> 16
 <211> 351
 <212> PRT
 <213> Gallus gallus

<400> 16

Met Glu Thr Gly Gly Gly Gln Gly Leu Pro Val Leu Leu Leu Leu

1	5	10	15
Leu Leu Leu Arg Pro Cys Glu Val Ser Gly Arg Glu Ala Ala Cys Pro	20	25	30
Arg Pro Cys Gly Gly Arg Cys Pro Ala Glu Pro Pro Arg Cys Ala Pro	35	40	45
Gly Val Pro Ala Val Leu Asp Gly Cys Gly Cys Cys Leu Val Cys Ala	50	55	60
Arg Gln Arg Gly Glu Ser Cys Ser Pro Leu Leu Pro Cys Asp Glu Ser	65	70	75
Gly Gly Leu Tyr Cys Asp Arg Gly Pro Glu Asp Gly Gly Gly Ala Gly	85	90	95
Ile Cys Met Val Leu Glu Gly Asp Asn Cys Val Phe Asp Gly Met Ile	100	105	110
Tyr Arg Asn Gly Glu Thr Phe Gln Pro Ser Cys Lys Tyr Gln Cys Thr	115	120	125
Cys Arg Asp Gly Gln Ile Gly Cys Leu Pro Arg Cys Asn Leu Gly Leu	130	135	140
Leu Leu Pro Gly Pro Asp Cys Pro Phe Pro Arg Lys Ile Glu Val Pro	145	150	155
Gly Glu Cys Cys Glu Lys Trp Val Cys Asp Pro Arg Asp Glu Val Leu	165	170	175
Leu Gly Gly Phe Ala Met Ala Ala Tyr Arg Gln Glu Ala Thr Leu Gly	180	185	190
Ile Asp Val Ser Asp Ser Ser Ala Asn Cys Ile Glu Gln Thr Thr Glu	195	200	205
Trp Ser Ala Cys Ser Lys Ser Cys Gly Met Gly Phe Ser Thr Arg Val	210	215	220
Thr Asn Arg Asn Gln Gln Cys Glu Met Val Lys Gln Thr Arg Leu Cys	225	230	235
Met Met Arg Pro Cys Glu Asn Glu Glu Pro Ser Asp Lys Lys Gly Lys			

	245		250		255
Lys Cys Ile Gln Thr Lys Lys Ser Met Lys Ala Val Arg Phe Glu Tyr	260	265	270		
Lys Asn Cys Thr Ser Val Gln Thr Tyr Lys Pro Arg Tyr Cys Gly Leu	275	280	285		
Cys Asn Asp Gly Arg Cys Cys Thr Pro His Asn Thr Lys Thr Ile Gln	290	295	300		
Val Glu Phe Arg Cys Pro Gln Gly Lys Phe Leu Lys Lys Pro Met Met	305	310	315	320	
Leu Ile Asn Thr Cys Val Cys His Gly Asn Cys Pro Gln Ser Asn Asn	325	330	335		
Ala Phe Phe Gln Pro Leu Asp Pro Met Ser Ser Glu Ala Lys Ile	340	345	350		
<210> 17					
<211> 357					
<212> PRT					
<213> Homo sapiens					
<400> 17					
Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu	1	5	10	15	
Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala Ala Thr	20	25	30		
Gln Arg Cys Pro Pro Gln Cys Pro Gly Arg Gly Leu Tyr Cys Asp Arg	35	40	45		
Ser Ala Asp Pro Ser Asn Gln Thr Gly Ile Cys Thr Ala Val Glu Gly	50	55	60		
Asp Asn Cys Val Phe Asp Gly Cys Ile Tyr Arg Ser Gly Glu Lys Phe	65	70	75	80	
Gln Pro Ser Cys Lys Phe Gln Cys Thr Cys Arg Cys Pro Ala Thr Pro	85	90	95		
Pro Thr Cys Ala Pro Gly Val Arg Ala Val Leu Asp Gly Cys Ser Cys	100	105	110		

Cys Leu Val Cys Ala Arg Gln Arg Gly Glu Ser Cys Ser Asp Leu Glu
 115 120 125

Pro Cys Asp Glu Ser Ser Asp Gly Gln Ile Gly Cys Val Pro Arg Cys
 130 135 140

Gln Leu Asp Val Leu Leu Pro Glu Pro Asn Cys Pro Ala Pro Arg Lys
 145 150 155 160

Val Glu Val Pro Gly Glu Cys Cys Glu Lys Trp Ile Cys Gly Pro Asp
 165 170 175

Glu Glu Asp Ser Leu Gly Gly Leu Thr Leu Ala Ala Tyr Arg Pro Glu
 180 185 190

Ala Thr Leu Gly Val Glu Val Ser Asp Ser Ser Val Asn Cys Thr Lys
 195 200 205

Lys Ser Leu Lys Ala Ile His Leu Gln Phe Lys Asn Cys Thr Ser Leu
 210 215 220

His Thr Tyr Lys Pro Arg Phe Cys Gly Val Cys Ser Asp Gly Arg Cys
 225 230 235 240

Cys Thr Pro His Asn Thr Lys Thr Ile Gln Ala Glu Phe Gln Cys Ser
 245 250 255

Ile Glu Gln Thr Thr Glu Trp Thr Ala Cys Ser Lys Ser Cys Gly Met
 260 265 270

Gly Phe Ser Thr Arg Val Thr Asn Arg Asn Arg Gln Cys Glu Met Leu
 275 280 285

Lys Gln Thr Arg Leu Cys Met Val Arg Pro Cys Glu Gln Glu Pro Glu
 290 295 300

Gln Pro Thr Asp Lys Lys Gly Lys Lys Cys Leu Arg Pro Gly Gln Ile
 305 310 315 320

Val Lys Lys Pro Val Met Val Ile Gly Thr Cys Thr Cys His Thr Asn
 325 330 335

Cys Pro Lys Asn Asn Glu Ala Phe Leu Gln Glu Leu Glu Leu Lys Thr
 340 345 350

Thr Arg Gly Lys Met
355

<210> 18
<211> 184
<212> PRT
<213> Homo sapiens

<400> 18

Met Lys Ser Val Leu Leu Thr Thr Leu Leu Val Pro Ala His Leu
1 5 10 15

Val Ala Ala Trp Ser Asn Asn Tyr Ala Val Asp Cys Pro Gln His Cys
20 25 30

Asp Ser Ser Gly Glu Asp Pro Phe Gly Glu Glu Phe Gly Ile Cys Lys
35 40 45

Asp Cys Pro Tyr Gly Thr Phe Gly Met Asp Cys Arg Glu Thr Cys Asn
50 55 60

Cys Gln Ser Gly Ile Cys Asp Arg Gly Thr Gly Lys Glu Cys Lys Ser
65 70 75 80

Ser Pro Arg Cys Lys Arg Thr Val Leu Asp Asp Cys Gly Cys Cys Arg
85 90 95

Val Cys Ala Ala Gly Arg Gly Glu Thr Cys Tyr Arg Thr Val Ser Gly
100 105 110

Met Asp Gly Met Lys Cys Gly Pro Gly Leu Arg Cys Gln Pro Ser Asn
115 120 125

Cys Leu Lys Phe Pro Phe Phe Gln Tyr Ser Val Thr Lys Ser Ser Asn
130 135 140

Arg Phe Val Ser Leu Thr Glu His Asp Met Ala Ser Gly Asp Gly Asn
145 150 155 160

Ile Val Arg Glu Glu Val Val Lys Glu Asn Ala Ala Gly Ser Pro Val
165 170 175

Met Arg Lys Trp Leu Asn Pro Arg
180

<210> 19
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 19

Met	Gln	Arg	Ala	Arg	Pro	Thr	Leu	Trp	Ala	Ala	Ala	Leu	Thr	Leu	Leu	1	5	10	15
Val	Leu	Leu	Arg	Gly	Pro	Pro	Val	Ala	Arg	Ala	Gly	Ala	Ser	Ser	Gly	20	25	30	
Gly	Leu	Gly	Pro	Val	Val	Arg	Cys	Glu	Pro	Cys	Asp	Ala	Arg	Ala	Leu	35	40	45	
Ala	Gln	Cys	Ala	Pro	Pro	Pro	Ala	Val	Cys	Ala	Glu	Leu	Val	Arg	Glu	50	55	60	
Pro	Gly	Cys	Gly	Cys	Cys	Leu	Thr	Cys	Ala	Leu	Ser	Glu	Gly	Gln	Pro	65	70	75	80
Cys	Gly	Ile	Tyr	Thr	Glu	Arg	Cys	Gly	Ser	Gly	Leu	Arg	Cys	Gln	Pro	85	90	95	
Ser	Pro	Asp	Glu	Ala	Arg	Pro	Leu	Gln	Ala	Leu	Leu	Asp	Gly	Arg	Gly	100	105	110	
Leu	Cys	Val	Asn	Ala	Ser	Ala	Val	Ser	Arg	Leu	Arg	Ala	Tyr	Leu	Leu	115	120	125	
Pro	Ala	Pro	Pro	Ala	Pro	Gly	Asn	Ala	Ser	Glu	Ser	Glu	Glu	Asp	Arg	130	135	140	
Ser	Ala	Gly	Ser	Val	Glu	Ser	Pro	Ser	Val	Ser	Ser	Thr	His	Arg	Val	145	150	155	160
Ser	Asp	Pro	Lys	Phe	His	Pro	Leu	His	Ser	Lys	Ile	Ile	Ile	Ile	Lys	165	170	175	
Lys	Gly	His	Ala	Lys	Asp	Ser	Gln	Arg	Tyr	Lys	Val	Asp	Tyr	Glu	Ser	180	185	190	
Gln	Ser	Thr	Asp	Thr	Gln	Asn	Phe	Ser	Ser	Glu	Ser	Lys	Arg	Glu	Thr	195	200	205	

Glu Tyr Gly Pro Cys Arg Arg Glu Met Glu Asp Thr Leu Asn His Leu
210 215 220

Lys Phe Leu Asn Val Leu Ser Pro Arg Gly Val His Ile Pro Asn Cys
225 230 235 240

Asp Lys Lys Gly Phe Tyr Lys Lys Lys Gln Cys Arg Pro Ser Lys Gly
245 250 255

Arg Lys Arg Gly Phe Cys Trp Cys Val Asp Lys Tyr Gly Gln Pro Leu
260 265 270

Pro Gly Tyr Thr Thr Lys Gly Lys Glu Asp Val His Cys Tyr Ser Met
275 280 285

Gln Ser Lys
290